

JULY, 1944

# BUSINESS CONDITIONS

A REVIEW BY THE FEDERAL RESERVE BANK OF CHICAGO

# Livestock Balance a Problem to Farmers

## *Reduction in Numbers Indicated*

The top-heavy livestock situation is giving way to a more balanced relationship between animals and feeds, largely as a result of very extensive liquidation of hogs in the past months and probably of cattle in the months to come, and the expected reduction in 1944 pig crops and poultry flocks.

### **HOGS HEAVILY LIQUIDATED**

Local slaughter of hogs at yards for the twelve months ending July 31, 1944 will probably total about 37 million head. This will be very nearly double the slaughter for the average of the five corresponding years of 1935-1939. The heavy marketings of recent months have taxed the capacity of the marketing and slaughtering facilities to handle them and frequently embargoes on shipments or permit systems have been employed at many markets in order to hold back the tide. The phenomenal pig crop of 122 million pigs in the spring and fall of 1943 is just now finishing its run to market. Under the stimulus of a favorable feeding ratio and patriotic response to needs for pork the nation's farmers produced more hogs than the system could absorb in the face of labor shortages. The burden of market receipts was so great that governmental authorities were forced into an embarrassing situation as far as support prices on "government weights" were concerned.

An important factor in the liquidation that has occurred has been the shortage of corn for livestock feeding. Just at the time when many producers needed corn to finish their hogs they were unable to obtain it because stocks had been frozen in order to supply processors with the corn essential to vital war production. Even more fundamental in the maladjustment was the artificial relationship long maintained between corn and hog prices, giving the corn too low a price to the producer unless marketed through livestock. This encouraged the holding of corn and aggravated the situation.

### **HOG PRODUCTION DECLINING**

To some extent these factors have come into adjustment. Declining hog prices have reduced the hog-corn price ratio from around 16 bushels in early 1943 to below 11 bushels at the present time. The "freeze" of corn stocks was recently withdrawn because the sales or contracts by farmers to deliver to Commodity Credit Corporation for processors had apparently met the needs of the latter, at least until the new crop becomes available.

The June 1 Pig Crop Report indicates a reduction of 28 per cent from 1943 in the expectations for 1944. A decline of 24 per cent was indicated for this spring's crop from that of last year, and the report showed an expected drop in the fall crop to one-third below the pig crop of the fall of 1943. If these reductions are fully realized hog producers will have retrenched at nearly twice the rate asked for by the War Food Administration, which suggested a reduction

of 16 per cent in the 1944 spring and fall crops. Even with the cuts indicated in the Pig Crop Report, the 1944 pig crop will be one of the largest of record and will mean likewise a heavy production of lard, pork, and pork products in the coming twelve months slaughter period. However, in view of the heavy demands to be filled, it will mean less pork for consumers next year than they have had in recent months.

A further factor to complicate the hog outlook, which may make the reduction in the fall crop less than the indicated one-third drop from 1943, is the question of what will be done about the requirements set forth in the new price control bill, which became effective July 1. Under a literal interpretation of the law it is believed by some that the War Food Administration would be required to support hogs at \$14.00 or above, Chicago basis. WFA some time ago announced that support prices on hogs weighing 200-240 pounds would decline from the present \$13.75 to \$12.50 on October 1 of this year.

### **ADJUSTMENT IN CATTLE NUMBERS NEEDED**

The cattle situation is suspended on the horns of dilemma. While reduction of cattle numbers is called for because of the high level of inventories, the needs for beef to meet civilian and military demand, and the doubtful feed situation, there is the problem of transportation and slaughter capacity to handle marketings in the volume indicated.

The feed situation, in spite of some recent improvements in the livestock-feed balance, is so tight that unless some reductions are made in cattle numbers producers will still face the danger that feed supplies will be insufficient to carry cattle in good growing condition. The reserves of feed that have been drawn upon in the past two years are now gone. While crop prospects for the current year are at present reasonably good, the production of adequate tonnages to carry current inventories of cattle seems unlikely, particularly in view of the reductions that have been made in hay and pasture acreages in order to produce higher yielding crops. The current feed crop outlook is reviewed below.

Cattle numbers at the beginning of the year were at an all-time high, exceeding 82 million head, about equally divided between milk cattle and beef cattle. This figure was more than eight million above the previous peak of 1934. It represents an increase of nearly 25 per cent in inventories in the past five years.

Downward adjustment of cattle numbers can be made to good advantage at the present time. Beef is in heavy demand for the war food program. Civilian purchasing power is at a high level, resulting in increased demand for all meats. Therefore, the balancing of cattle with range and feed carrying capacity by marketing substantial numbers for slaughter

*(Continued on Page 4)*

# Ownership Pattern of Seventh District Deposits

## *Survey Reveals Wide Differences among Banks*

Deposits of manufacturing firms, personal deposits, including those of farmers, and balances of businesses engaged in retail and wholesale trade constitute the three largest ownership categories of demand deposits of individuals and businesses at Seventh District banks. Manufacturing deposits are concentrated in large accounts and in large banks, whereas the bulk of personal deposits is held in small accounts and in the smaller banks.

These are some of the leading conclusions of a survey of deposit ownership as of February 29, 1944, which the Federal Reserve Bank of Chicago has conducted in collaboration with 162 Seventh District member banks. These cooperating banks hold two-thirds of the deposits of all district banks, member and nonmember. On the basis of their reports, estimates have been made of the ownership of all Seventh District demand deposits of individuals, partnerships, and corporations by seven major economic groups and by four size groups of banks.

The estimates are tentative and will be revised on the basis of a deposit survey as of July 31 which is now being conducted. Further information will be presented in subsequent issues of *Business Conditions* concerning the distribution of business deposits between corporate and other firms, the distribution of deposits by size of account, and the changing pattern of deposit ownership during the war.

### SIGNIFICANCE OF DEPOSIT OWNERSHIP

The ownership of demand deposits is of particular significance at the present time in view of the large wartime growth in cash balances which has resulted from the financing of a substantial portion of the war deficit through the purchase of Government securities by the banking system. Estimates of deposit ownership by states and Federal Reserve Districts and for the nation are helpful in making preparations for war loan drives and in gauging their results. The pattern of deposit ownership throws light upon the important postwar questions of accumulated consumer purchasing power, the working capital position of business firms in relation to their financial needs for reconversion and expansion, and the investment policies of banks.

### BANKS CLASSIFIED BY SIZE

To facilitate analysis of the results of the deposit survey and to enable Seventh District bankers to compare deposit ownership at their banks with that at other banks comparable in size, the 2,420 member and nonmember banks in the Seventh District were classified into four groups on the basis of the amount of demand deposits of individuals, partnerships, and corporations which they hold.

Three member banks have demand deposits of individuals and businesses in excess of 500 million dollars. The amount of such deposits at these banks, two of which are located in Chicago and one in Detroit, was 2,655 million dollars on February 29, 1944, an increase of 46 per cent over December 31, 1941. At the end of February these banks held 30 per cent of total district deposits, but had received only 24 per cent of the district increase since the end of 1941.

Demand deposits of individuals and businesses ranged between 100 and 500 million dollars at eight member banks. These deposits aggregated 1,689 million dollars on the date of the survey, having risen 60 per cent since the end of 1941. Four of these banks are in Chicago, two in Detroit, one in Milwaukee, and one in Indianapolis. Their share of the district increase — somewhat over one-sixth — has been about the same as their share of district deposits.

Banks with demand deposits of individuals, partnerships, and corporations between 5 million dollars and 100 million dollars comprise the third group. On February 29 deposits at these banks stood at 2,266 million dollars, 74 per cent more than on December 31, 1941. Eighteen nonmember banks and 157 member banks are included in this group. These banks have received one-fourth of the district increase in deposits and hold that share of the district total.

Demand deposits of individuals and businesses amounted to 2,225 million dollars at banks with less than 5 million dollars of such deposits. These 2,234 banks showed a deposit increase of 95 per cent in the twenty-six months prior to the February 29 survey. In this group are 785 member banks and 1,449 nonmember banks. These banks received 31 per cent of the district deposit increase since the end of 1941, but hold 25 per cent of demand deposits of individuals, partnerships, and corporations.

### MANUFACTURING DEPOSITS

Manufacturing and mining firms constitute the largest Seventh District ownership category. Deposits owned by these firms amounted to about three billion dollars or one-third of all demand deposits of individuals and businesses in the district on February 29. Firms engaged in metal manufactures, including machinery and transportation equipment, hold about two-thirds of industrial deposits.

Manufacturing deposits showed an extreme degree of concentration in large accounts and large banks. Almost four-fifths of the deposit total owned by manufacturing firms was in accounts over 100 thousand dollars and seven-tenths was in the eleven largest banks.

This concentration is evident in differences among the four size-groups of banks in respect to the importance of manufacturing deposits in the makeup of deposits. In the

two groups of large banks, deposits owned by manufacturing firms constitute about half of all demand deposits of individuals and businesses at these banks. This contrasts with the distribution at banks in the 5 to 100 million dollar group and at banks under 5 million dollars, where such deposits comprise one-fourth and one-seventh of demand deposits.

#### PERSONAL DEPOSITS

Personal deposits, including those of farmers, form the second largest portion of Seventh District demand deposits. The volume of personal deposits was about 2,500 million dollars and comprised almost three-tenths of the district total.

In contrast to the situation for manufacturing balances, the bulk of the dollar amount of personal deposits is held in small accounts and in the smaller banks. At least two-thirds of the aggregate of personal deposits is in accounts under 5 thousand dollars. Almost half the personal deposit total is in banks with deposits under 5 million dollars, and three-tenths is in banks between 5 million dollars and 100 million dollars.

The importance of personal deposits in the make-up of deposits at banks varies inversely with the size of the banks. In the smallest size-group personal deposits, including deposits of farmers, comprised over half the demand deposits. In the 5 to 100 million dollar group a third of the deposit total was personal. In the eight banks in the second group one-sixth of the aggregate of deposits was personal, while at the three very large banks personal deposits were only one-tenth of the deposits of individuals and businesses.

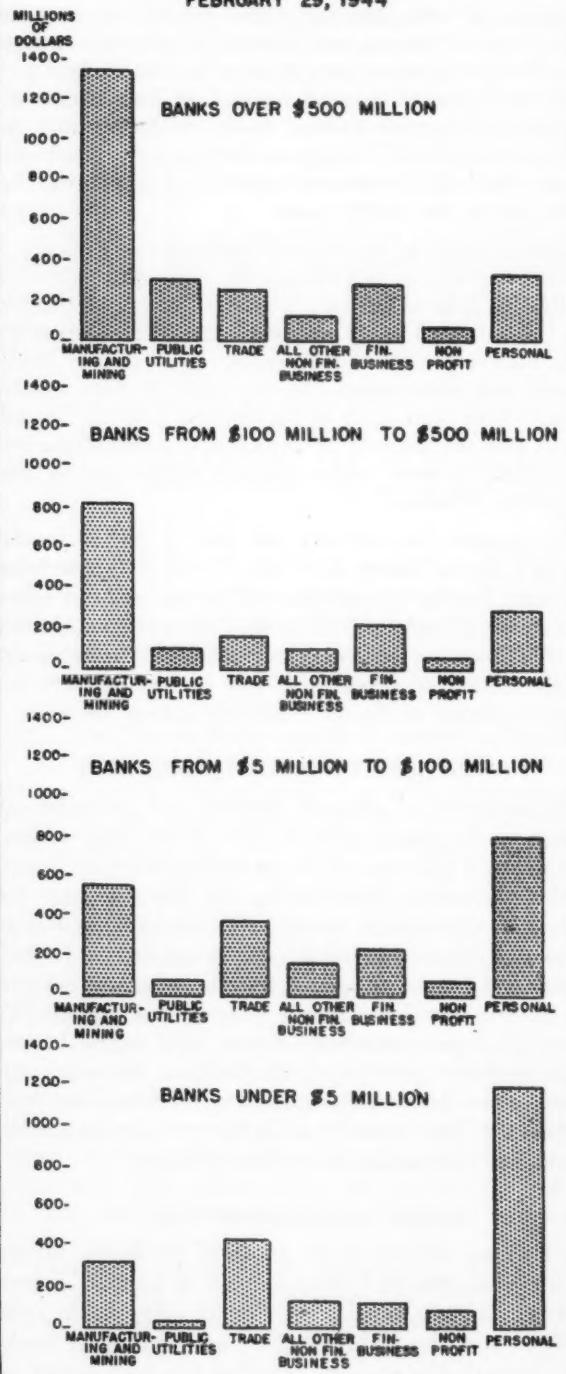
#### TRADE DEPOSITS

Next in importance among the ownership classes is retail and wholesale trade and dealers in commodities. Deposits of firms in this category comprise 1,200 million dollars or over one-twelfth of district deposits. In contrast to both manufacturing and personal deposits, trade balances are more evenly divided among sizes of accounts and sizes of banks. About two-thirds of the aggregate of trade deposits in the Seventh District was located in the two lowest size-groups, and one-third in the largest eleven banks. Trade deposits constituted under one-tenth of the deposits at the largest banks and about one-sixth of deposits at smaller banks.

Deposits of financial businesses at Seventh District banks stood at 800 million dollars on February 29. Insurance companies, trust funds of banks, and investment, loan, and real estate businesses make up this category. These deposits constituted less than 10 per cent of all demand deposits of individuals and businesses.

Deposits of public utilities, transportation, and communications firms accounted for about one-twentieth of district deposits, but showed great concentration in large accounts and large banks. Three-fifths of the deposit total owned by these firms was in the three large banks, and four-fifths was in accounts over 100 thousand dollars.

ESTIMATED OWNERSHIP OF DEMAND DEPOSITS  
OF INDIVIDUALS AND BUSINESSES  
ALL SEVENTH DISTRICT BANKS  
FEBRUARY 29, 1944



ESTIMATED OWNERSHIP OF DEMAND DEPOSITS OF INDIVIDUALS, PARTNERSHIPS, AND CORPORATIONS  
MEMBER AND NONMEMBER BANKS IN THE SEVENTH FEDERAL RESERVE DISTRICT  
FEBRUARY 29, 1944

Type of depositor	Banks having demand deposits of individuals, partnerships, and corporations of:				All Banks
	Over \$500,000,000	\$100,000,000 to \$500,000,000	\$5,000,000 to \$100,000,000	Under \$5,000,000	
DOLLAR AMOUNTS (in millions)					
Manufacturing and mining.....	1,347	815	559	313	3,034
Public utilities, transportation, and communications .....	298	94	72	26	490
Retail and wholesale trade and dealers in commodities.....	251	157	376	419	1,203
All other nonfinancial business, including construction and services.....	119	94	158	117	488
Financial business .....	270	201	228	107	806
Non-profit associations, churches, clubs, etc.....	63	49	80	74	266
Personal, including farmers.....	306	279	793	1,169	2,547
Total .....	2,655	1,689	2,266	2,225	8,836
PERCENTAGE DISTRIBUTION BY TYPES OF DEPOSITORS					
Manufacturing and mining.....	50.7	48.3	24.7	14.0	34.3
Public utilities, transportation, and communications .....	11.2	5.6	3.2	1.2	5.5
Retail and wholesale trade and dealers in commodities.....	9.5	9.3	16.6	18.8	13.6
All other nonfinancial business, including construction and services.....	4.5	5.6	7.0	5.3	5.5
Financial business .....	10.2	11.9	10.1	4.8	9.1
Non-profit associations, churches, clubs, etc. ....	2.4	2.9	3.5	3.3	3.0
Personal, including farmers.....	11.5	16.5	35.0	52.5	28.8
Total .....	100.0	100.0	100.0	100.0	100.0
PERCENTAGE DISTRIBUTION BY GROUPS OF BANKS					
Manufacturing and mining.....	44.4	26.9	18.4	10.3	100.0
Public utilities, transportation, and communications .....	60.8	19.2	14.7	5.3	100.0
Retail and wholesale trade and dealers in commodities .....	20.9	13.1	31.3	34.8	100.0
All other nonfinancial business, including construction and services.....	24.4	19.3	32.4	24.0	100.0
Financial business .....	33.5	24.9	28.3	13.3	100.0
Non-profit associations, churches, clubs, etc. ....	23.7	18.4	30.1	27.8	100.0
Personal, including farmers.....	12.0	11.0	31.1	45.9	100.0
Total .....	30.1	19.1	25.6	25.2	100.0

## LIVESTOCK PROBLEM

(Continued from Inside Cover)

appears wise during the current season. Postponing inevitable liquidation involves the risks of striking a period when the demand for meat is reduced.

Last fall the State Agricultural Goals Committees advised the reduction of cattle numbers to a total of 77 million head by the end of this year. It has been estimated that this would require the slaughter of about 36.5 million head of cattle and calves, compared with about 27 to 28 million head slaughtered in 1943. It is further estimated that a slaughter of 32 million cattle and calves this year would reduce the inventory at the end of the year by only about one million head. During the first half of this year the rates of marketing, assuming the usual seasonal pattern of cattle marketings, were such as to suggest that only about 32 million will be marketed.

Adjustment of cattle population to the level indicated by feed and range capacity means the slaughter of cows and heifers that would otherwise be kept over for breeding. War Food Administration officials suggest a reduction of 4 million head by the end of the year, made up of 700,000 milk cows (heifers and heifer calves) and 3,300,000 beef cattle. Suggested reductions for beef cattle were: 1,700,000 cows, 400,000 heifers (one- and two-year olds), 800,000 yearling steers, 100,000 yearling bulls, and 300,000 other calves.

Because a large bulk of the beef breeding stock is in the Great Plains and western states much of the suggested beef reduction is for these regions in order to bring numbers into line with carrying capacity. In Iowa, Illinois, Indiana, and Michigan considerable reductions are also suggested in view of reduced pasture acreages, with these states producing, meanwhile, the maximum possible output of beef with such feeds as are not more productive when fed to other livestock, such as silage and corn stalks.

Changes in dairy cattle are suggested along the line of increasing further the number of milk cows in order to provide more dairy products. The limits here would be the available feed and the labor and other facilities. The WFA suggestion is for an increase in milk cows to just above 28 million by the end of the year (an increase of 600,000) and a reduction of 1,300,000 head in heifer calves and heifers up to two years old, since not so many head of young stock will be needed if the upward trend in numbers is stopped. In general, culling of both dairy and beef cows is urged in order to improve herd efficiency.

### CATTLE MARKETINGS MAY HIT BOTTLENECKS

Handling the desired slaughter of cattle raises some problems that might become critical. A peak of cattle receipts in October, along with the seasonally increasing run of hogs, may put a strain on both transportation and slaughtering facilities. Such a peak of receipts from the range and from feed lots would possibly find the railroads short of stock cars,

locomotives, and labor. These would be hard to spare from urgent wartime shipping, especially with the long hauls and return of empty cars involved in shipping from western ranges. Similarly, the strain on the serious trucking situation in the Corn Belt would be greatest when hogs are also in heavy movement. Normally the slaughtering plants would be able to handle the desired slaughter of cattle and calves but it is probable that this fall, chiefly because of the labor shortage, the plants would be unable to handle all the cattle that would come in at the peak if slaughter of 35 million head for the year is achieved.

A partial solution to these difficulties would be to market a larger-than-usual proportion of these cattle before and after the October peak. Transportation facilities would be less tight before the peak of October is reached. Some slaughter plant labor would be available before the hog kill becomes seasonally heavy.

The producer should not overlook the price aspects of such a peak in cattle marketings. Since last winter the price of cattle has been affected to considerable degree by the subsidies paid to slaughterers. To receive these subsidy payments the slaughterers must pay prices for animals that give a general average price within specified ranges, with excesses above or deficits below the range deducted from the subsidy payments. This stabilization program would be of specific importance to producers in the face of very heavy fall marketings in excess of slaughtering capacity. Weaker competition for the cattle might then force the price down below the point where the limits to the subsidy payment would cease to be effective in supporting the minimum of the scheduled price range.

### PROSPECTS FOR FEED CROPS STILL IN DOUBT

Regarding the current feed prospects, the July 1 Crop Report indicated a probable production of the principal feed grains (corn, oats, and barley) about two per cent less than the tonnage produced in 1943.

However, drouth conditions throughout the country, especially east of the Mississippi River, have made it necessary to qualify this year's crop expectations. Late planned crops in some areas have suffered for lack of moisture. Corn in some states is suffering because parching of tassels and silk has prevented proper pollination. Dry and burned pastures have been reduced in feeding capacity necessitating preseasional use of the new hay crop cut to date. Lack of moisture has prevented the maximum filling of kernels in oats and other small grain crops. In the Corn Belt the progress of corn shows wide ranges of development, due to the wet spring and late plantings and re-plantings in many areas. The acreage figures may appear reassuring, but much of the corn crop will need the optimum of growing conditions if it is to yield needed tonnages of corn. This means rain, hot days and nights, and a delayed frost date to prevent millions of bushels of soft corn.

# Bank Debits as Measure of Business Conditions

## *Data Available for Seventh District Cities*

Bank debits as evidence of the dollar volume of business transactions have long been regarded as an important measure of economic activity. No small portion of their popularity arises from their ready availability manifested by prompt reporting and geographical detail. Weekly and monthly series have been available since 1919 for the entire country, the twelve Federal Reserve Districts, and many cities throughout the nation.<sup>1</sup> As accessibility of these data has led to their frequent use, and occasionally to their misuse, it is pertinent to consider briefly the component elements in the series and some of the more important limitations.

### COVERAGE OF SEVENTH DISTRICT REPORTS

The monthly debit series in the Seventh District are now based on reports from 216 member and nonmember banks in fifty centers. These banks have 68 per cent of the district deposits against which debit totals are reported. In these terms and on a state (Seventh District portion) basis, 77 per cent of the total deposits are reflected by Illinois reporting banks, 75 per cent by Michigan, 56 per cent by Wisconsin, 53 per cent by Indiana, and 35 per cent by Iowa. The present weekly series are based on reports of only 43 banks, but on a district basis these reports cover close to 60 per cent of the related deposit totals.

### BANK DEBITS DEFINED

Bank debits are charges recorded against depositors' accounts when checks which they have written in settlement of their obligations are presented for payment to the bank in which the deposits are kept. Bank records classify deposits as "demand" and "time" and subclassify them as follows:

- (a) of individuals, partnerships, and corporations;
- (b) of the United States Government;
- (c) of states and political subdivisions;
- (d) of other banks; and
- (e) Postal Savings deposits (time only).

The present monthly debit series are based on charges to all of these deposit accounts, excepting deposits of other

<sup>1</sup>More specifically, the monthly data are available for 141 nationwide centers from 1919 to date; additional centers were added during the 1920's and early 1930's (there were 259 in 1925); from 1936-1942 the number of reporting centers was constant at 274; and, in May, 1942, 60 centers were added. Until 1942 the monthly series were derived from weekly reports; since then they have been compiled from monthly reports from a larger sample of banks. The weekly data are now based on a different classification of deposit accounts, excluding time and U. S. Government as well as interbank deposits, and are collected from banks in 101 cities. The revised weekly series have been extended back to 1935.

banks (d, above). The current weekly series are based upon the total of demand deposits of individuals, partnerships, corporations, and of states and political subdivisions. The weekly data are thus less inclusive as they omit charges to time and all U. S. Government deposits. The debits involved in this omission, however, comprise less than ten per cent of the total.

### CHARACTERISTICS OF DEBIT SERIES

Debits in the main represent payments for the purchase of goods and services; this is the fact that makes them useful in economic analysis. They exhibit, for example, a marked similarity to national income figures in timing, trend, and amplitude. The series, however, include payments for securities purchased, borrowing transactions, transfers of funds from one locality to another, and cash withdrawals. These elements distort trend, seasonal, and cyclical movements in the series. For example, New York debits are commonly excluded from the national series when it is used to measure business fluctuations because of the movement of foreign funds and the influence of stock and capital markets. In the boom years of the 1920's, speculative influences distorted debits for other large centers. Furthermore, the volume of goods and services purchased covers those in intermediate stages of production and not just those entering into final consumption. That is, they encompass the transactions between extractive industries, manufacturers, wholesalers, and retailers.

The all-inclusive and overlapping characteristic of the debit series thus limits its usefulness in analyses which attach importance to the timing of economic processes. An acceleration or retardation in the volume of gross check payments is, therefore, a less sensitive indicator of cyclical changes than other available measures, for example, orders for capital goods.

Seasonal variations in monthly debits have a rather consistent pattern. The typical measurement in terms of a monthly average level runs as follows: December is the peak month, ranging from 10 to 20 per cent over the monthly average; January falls to a position slightly above the average; February is 10 to 15 per cent below; March is somewhat above the January level; April, May, June, and July are near the average; August and September are 5 to 10 per cent below; October is comparable to January; and November is somewhat erratic but tends to be below the April-July level. For particular centers these seasonal characteristics are frequently distorted by nonrecurring influences, and during the past two years quarterly income tax payments and war loan financing have strongly influenced monthly totals.

It is also worth noting that for a particular city or center debits reflect the volume of activity associated with the purchaser's or payer's place of business. The Des Moines consumer may buy goods produced in Chicago; this transaction will appear in the debits for the Des Moines area but not in those for Chicago, though they may have been reflected earlier in Chicago debits for payroll and raw material purchases. This type of transaction suggests that what might be called a series of *credits* to deposit accounts may be more useful than *debits*; it would include proceeds from outside borrowings or goods sold to other communities. Thus, a marked difference in seasonal characteristics of a debit and credit series for certain cities may arise. Over a longer period the many inflows and outflows for a particular community tend to a rough balance, but the uneven geographical expansion or contraction in business finds a counterpart in relative differences in bank deposit and reserve balance trends as well as in continuing divergences of credit and debit series.

#### LIMITATIONS OF DEBIT SERIES

There are important limitations on the debit series as indicators of the trend in the volume of local business. The most serious of these have to do with changes in the financial habits of the community or in the financial mechanisms by which the community carries on its business. For example, the large volume of government purchases in recent years has decreased the volume of intermediate transactions which characterize the production and private sale of many capital goods. The government purchases final products directly from the manufacturer, whereas in a peacetime economy much of such production goes through two or three intermediate stages (wholesale, jobber, and retail) and often through consumer financing channels. Again, the large volume of Treasury war financing through the Federal Reserve Banks gives rise to transactions which are not included in reported debit totals and entails qualification in comparisons between war and prewar periods. Furthermore, the relationship between checking and currency transactions is not a stable one and tends to be influenced by such things as service charges and taxes on checks; in the war period substantial shifts in the working population have disrupted established banking connections and frequently led to the substitution of currency for check payment.

Despite these limitations, and the further one that bank debits are expressed in dollar terms and hence are affected by changes in the price level, debits remain one of the best of the few series that are available for measuring the trend and swings in local and regional economic activity. Many users of debits are aware of their shortcomings, but there has been little refinement in them to eliminate the deficiencies or to gauge their quantitative significance. The most effective approach to the problem seems to lie in more detailed classification of debits and investigation of the credit series. For some communities and for particular purposes a credit series may be more useful; it can be derived from the debits by making adjustments for changing deposit balances.

The stratification of debits could proceed on the basis of subclassification of deposit accounts or type of payment. The former seems the more practical approach but is useful primarily as it indirectly reflects the latter. Thus, debit series might be developed for individual (nonbusiness) accounts and for several classifications of business deposits, for example, manufacturing, wholesaling and retailing, transportation, and financial. Such a breakdown, which would involve much more detailed reports than does the collection of the present data, would be most useful in apprehending the meaning of debit series and giving them far greater significance in interpreting economic activity.

#### TRENDS IN SEVENTH DISTRICT DEBITS

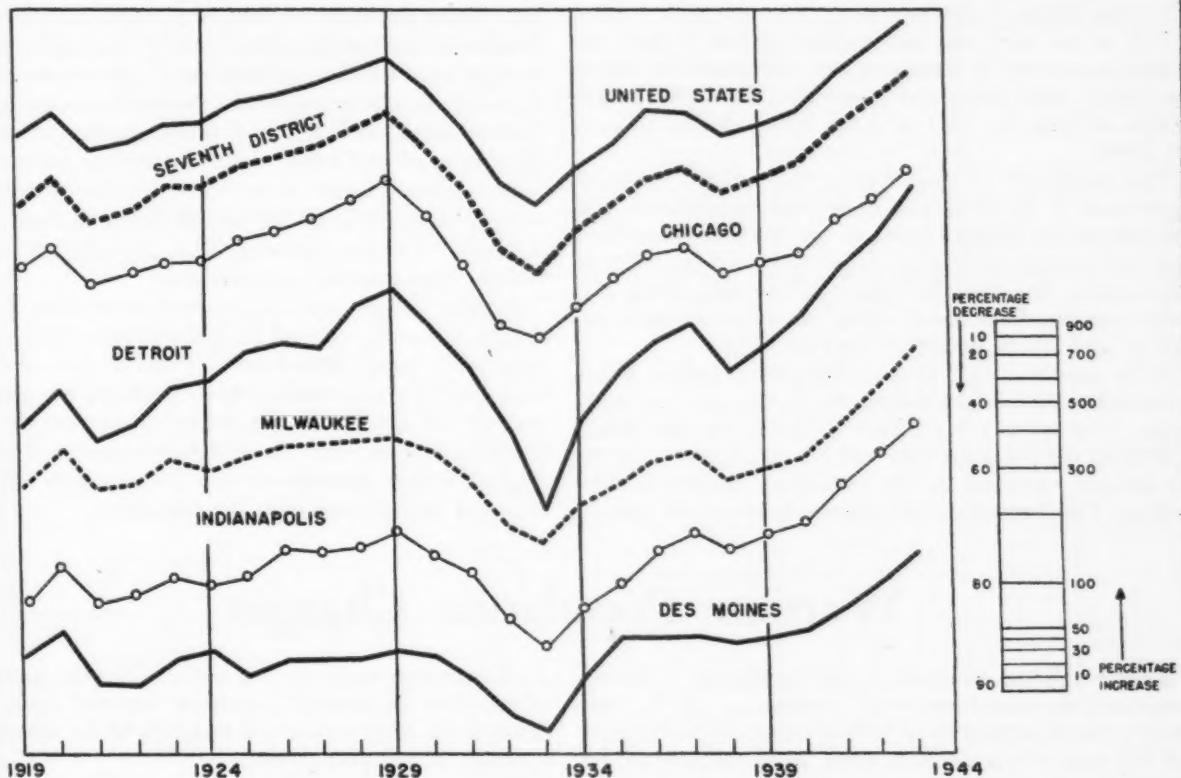
The tremendous expansion of debits since 1939 is unmatched by any comparable period in the past twenty-five years. During these four war and preparation-for-war years debits for the Seventh District as a whole have nearly doubled. Some of this increase reflects price level change, but the greater part arises from the very large volume of goods produced for prosecuting the war. In terms of a previous peak in activity—1929, 1942 was the first year in which the district and Chicago debits attained the 1929 level, though Des Moines exceeded it in 1935, Indianapolis in 1940, and Detroit and Milwaukee in 1941.

Other common features of the curves are worthy of note. Thus, within six years after the close of the last war the volume of bank debits of all the cities, with the exception of Des Moines, had exceeded the 1920 peak. The influence of the 1929 boom in the stock market is reflected in the sharp peaks for Chicago and Detroit, and, to a lesser extent Indianapolis, as well as in the curves representing the Seventh District and the United States. The curve for the United States covers 140 centers, excluding New York City, and thus is less influenced by speculative activity than the series of 141 centers which include New York.

Differences in the trends of recovery from the pit of the depression of the 1930's are emphasized by the situation of Detroit which appears to have suffered more severely and hence evidenced a sharper recovery than other cities. Drought conditions in Iowa doubtless account for the interruption of business revival as indicated by the Des Moines debits in the years 1936 and 1937. The more pronounced long time trend in Indianapolis and Detroit debits indicates the more rapid growth of these cities than Chicago or Milwaukee, and the relative concentration of war activity in Detroit and Indianapolis is manifested by the sharp rate of growth in these centers from 1939 onward.

The general similarity in movement of these curves for the twenty-five year period, obvious on a cursory inspection, should not obscure the important contrasts indicated by the different slopes of the lines throughout the period, the sharpness of recession and recovery, and the time required for the transactions in a given community to attain some earlier peak. Close study and comparison will suggest the pertinent features in the business history of these communities.

BANK DEBITS IN THE SEVENTH FEDERAL RESERVE DISTRICT  
ANNUAL TOTALS 1919-1943



**How to Read This Chart.** — The accompanying chart portrays the trends and cyclical swings in bank debits for major cities in the Seventh Federal Reserve District and for the United States. The period covered begins at the close of the last war and extends through 1943.

The lines are plotted on a ratio scale to make easier comparison of relative changes. Thus, the vertical distance between any two points on the same curve, measured off on the accompanying scale, shows the percentage increase or decrease from one period to another; in the conventional chart these differences would represent absolute changes. To illustrate, in 1933 Detroit bank debits stood at 3.8 billion dollars, in 1943 at 27.5 billion dollars, and the scale on the chart indicates this to be a 620 per cent increase, just as it denotes the drop from 14.8 billion dollars in 1929 to 1933 as a 74 per cent decrease. It is obvious that absolute and percentage changes may look quite differently on a chart; large absolute changes often are small percentage changes and vice versa. To illustrate again, Chicago debits

increased from 21.9 billion dollars in 1937 to 61.4 billion dollars in 1943; the absolute increase (39.5 dollars) was considerably larger than Detroit's 23.7 billion dollars in the same period, but the relative increase was considerably less, 185 per cent compared with 620 per cent.

Readers should not attach any significance to distance between the various curves (they are arbitrarily spaced) excepting as the gaps are narrowing or growing. The converging or diverging of any two lines affords a direct comparison of their relative trends.

The sharp dip in debits for 1933 probably exaggerates the recession in transactions in that year because there was widespread substitution of currency and coin for payments, and debit totals for the year cover only eleven months. The data on debits for the month in which the bank holiday occurred are regarded as too fragmentary and incomplete to warrant their inclusion in the total.

## Treasury Deficit Less Than Previous Year

In the four years since July 1, 1940, spending for war, including war expenditures of Government corporations, has totaled approximately 200 billion dollars, rising from about 6.7 billion dollars in the fiscal year 1940-1941 to 89.9 billion dollars in the fiscal year just ended. The part of these expenditures covered by borrowing was instrumental in raising the public debt, direct and guaranteed, from 48.5 billion dollars on June 30, 1940, to 202.6 billion dollars on June 30, 1944.

The magnitude of these figures can perhaps be better appreciated if comparison is made with expenditures and the debt during World War I. In the five fiscal years from mid-1914 to mid-1919 total Government expenditures amounted to less than 35 billion dollars, with the public debt expanding from about 1.2 billion dollars on June 30, 1914 to 25.5 billion dollars on June 30, 1919.

In the fiscal year 1943-44 the Government's budget deficit amounted to 49.6 billion dollars. While this is a very large figure, it is actually 6.3 billion dollars below the deficit realized in the preceding year and 5.2 billion dollars below the amount estimated in the President's January budget message. The decrease in the budget deficit resulted entirely

from a sharp expansion in receipts. Total budget expenditures increased 15.6 billion dollars to 93.7 billion dollars, but net receipts rose 21.9 billion dollars to 44.1 billion dollars, almost doubling the level of the preceding fiscal year. Besides the increase in national income and higher tax rates, receipts were swollen by adoption of the current tax payment system and by substantial receipts from renegotiation. Income taxes, including 8.4 billion dollars in withheld taxes, reached 34.7 billion dollars, more than twice the 16.1 billion dollars collected in fiscal 1943. "Other miscellaneous" receipts increased from 760 million dollars in fiscal 1943 to 3 billion 141 million dollars in fiscal 1944, largely reflecting receipts from contract renegotiation.

Regular budget expenditures were more than 2 billion dollars below the original budget estimates. War expenditures of 87 billion dollars fell 1.5 billion short of the estimate, probably as a result of lower prices on war goods and contract cut-backs, and other expenditures were also below estimates. Net receipts were 44.1 billion compared with the original budget estimate of 41.2 billion, with all major classes of receipts exceeding the estimates.

## Wartime Population Changes

Recently released estimates of total population, including members of the armed services not overseas on July 1, 1943, reveal a vast movement since 1940 to industrial-coastal areas and into most of the southern states where training of the armed forces has taken place on a large scale. In the Midwest only Michigan, which leads all states in war production, has gained population during the war.

California, with 8,466,522 persons in 1943 compared with 6,907,387 persons in 1940, has had the greatest population increase in the nation. As a result, California's rank in population has advanced from fifth to third. In-migration of civilians and members of the armed forces has expanded the population of Texas by more than one-half million persons, raising the state's rank from sixth to fifth nationally. Many other large states have experienced population losses, including New York and Pennsylvania, the first and second largest states; Illinois, which has dropped from third to fourth place; and Ohio, from fourth to sixth place in national population rank. Each of the three other district states has declined in rank — Indiana, from twelfth to thirteenth; Wisconsin, from thirteenth to sixteenth; and Iowa, from twentieth to twenty-third.

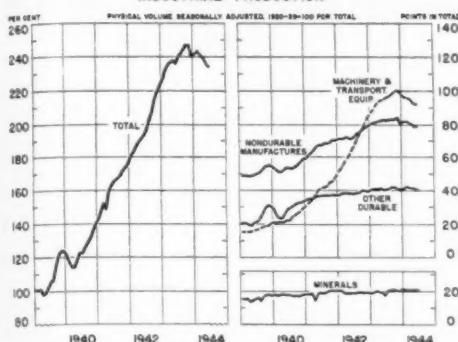
Inclusion of military and naval personnel in the population estimates indicates the location of the nation's principal war training program bases, supply depots, and embarkation points. The coastal areas, and particularly the Far West, have had the largest population gains in the nation in both civilian and armed service personnel. Highly important in-

ustrial activity on the eastern seaboard has also contributed substantially to increased population reported there, in addition to the large numbers of members of the armed forces stationed in that general area.

Within the Seventh Federal Reserve District states, as indicated, Michigan has made the only population increase during the war, a gain of 3.2 per cent. Losses in the other states have been heaviest in Iowa and Illinois, each in excess of 200,000 persons. Percentagewise, losses have ranged from -0.9 in Indiana to -8.7 in Iowa. The district states as a whole have reportedly lost 413,929 persons since 1940.

Slackening of war activities in industrial areas concentrating on specialized war equipment and gradual demobilization of the armed services will set in motion a reverse migration movement from the coastal regions to the interior of the nation. Nevertheless, it appears certain that many of the gains in population made by industrial and coastal communities at the expense of agricultural and interior communities will be permanent. The movement, since 1940, of probably a fourth (or perhaps even a third) of the nation's population to new residences, however temporary, in other states cannot fail to have far-reaching effects upon postwar population distribution. The results of wartime shifts and postwar counter-shifts in population will be evident in altered markets for industrial and agricultural products, employment and unemployment levels in particular areas, and revenues and expenditures of Federal, state, and local governments.

## INDUSTRIAL PRODUCTION



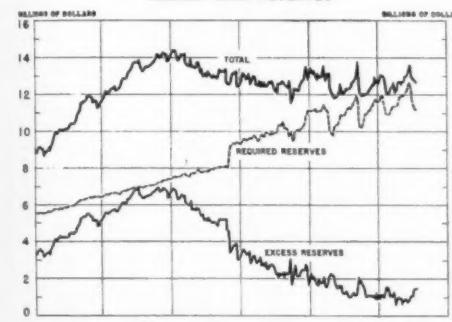
Federal Reserve indexes. Groups are expressed in terms of points in the total index. Monthly figures, latest shown are for June 1944.

## DEPARTMENT STORE SALES AND STOCKS



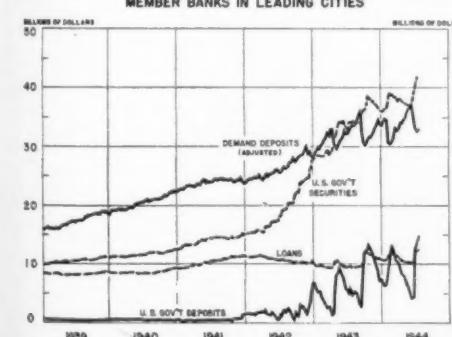
Federal Reserve indexes. Monthly figures, latest sales figures shown are for June 1944, latest stock figures shown are for May 1944.

## MEMBER BANK RESERVES



Breakdown between required and excess reserves partly estimated. Wednesday figures, latest shown are for July 12, 1944.

## MEMBER BANKS IN LEADING CITIES



Demand deposits (adjusted) exclude U. S. Government and interbank deposits and collection items. Government securities include direct and guaranteed issues. Wednesday figures, latest shown are for July 12, 1944.

NATIONAL SUMMARY OF BUSINESS CONDITIONS  
BY BOARD OF GOVERNORS OF FEDERAL RESERVE SYSTEM

Employment and production at factories continued to decline slightly in June; output of minerals was maintained in record volume. Retail trade and commodity prices showed little change in June and the early part of July.

**Industrial production**—The Board's seasonally adjusted index of industrial production was 235 per cent of the 1935-39 average in June as compared with 237 in May and 243 in the first quarter.

Steel production declined 4 per cent from the rate in May, reflecting partly manpower shortages. Output of nonferrous metals dropped 8 per cent, largely owing to the continued planned curtailment of aluminum and magnesium production. The lifting on July 15 of some of the restrictions on use of these metals was the initial step in a program to prepare for limited reconversion to peacetime output. Activity in the machinery and transportation equipment industries in June was maintained at the level of the preceding month. Increasing emphasis was reported on output of heavy artillery and artillery shells and of tanks. Lumber production continued to decline and was approximately 10 per cent below June 1943.

Production of nondurable goods was maintained in June. Meat packing activity declined further from the exceptionally high level in the first quarter, but output of most other food products continued to rise seasonally. Refinery output of gasoline advanced further and reached the earlier record level of December 1941. Activity in cotton textile mills and in the chemical and rubber industries showed little change in June.

Mine production of metals and coal was maintained in large volume and crude petroleum production continued to rise to new record levels.

**Distribution**—Department store sales declined more than seasonally in June, following a considerable increase in May, and the Board's index was 175 per cent of the 1935-39 average as compared with 183 in May and an average of 177 in the first four months of this year. Value of sales in the first half of 1944 was 7 per cent greater than in the first half of 1943. In the early part of July, sales were 9 per cent larger than a year ago.

Railroad freight carloadings showed little change in June and the first three weeks of July after allowance for seasonal movements.

**Commodity prices**—Legislation extending Federal price controls for one year was enacted June 30; certain restrictive provisions were relaxed, especially those relating to prices of cotton products. Prices of most commodities in wholesale and retail markets have recently shown little change.

**Agriculture**—Well over a billion bushels of wheat and almost 3 billion bushels of corn were in prospect on July 1. This is an improvement over June 1 prospects and aggregate crop production in 1944 may be about the same as in 1943 and larger than any year prior to 1942.

The number of chickens raised this year was 19 per cent smaller than last year; the spring pig crop was 24 per cent smaller and the fall crop may be a third smaller than in 1943. Marketings of cattle, however, have been normal in relationship to the numbers and unless marketings are increased during the rest of this year no material reduction of the large numbers of cattle on farms will occur.

**Bank credit**—As payments for securities purchased during the Fifth Drive transferred funds from private deposits to reserve-exempt Government accounts, the average level of required reserves at all member banks declined by close to 1 1/4 billion dollars. Reserve balances were reduced by about 800 million dollars and excess reserves rose by around 400 million. Reserve funds were absorbed through declines in reserve bank holdings of Government securities, by a moderate increase in currency, and by temporary increases in Treasury deposits at the reserve banks. Over the four weeks ending July 12, money in circulation rose by 230 million dollars, which is a smaller rate of growth than prevailed in recent months, reflecting the influence of the war loan drive.

During the Fifth Drive, between June 14 and July 12, Government security holdings at reporting member banks in 101 leading cities increased by 4.7 billion dollars. Additions to bank holdings resulted from purchases of securities from investors who were adjusting their positions prior to subscriptions during the drive, from increased purchases of Treasury bills, and from subscriptions to new securities in limited amounts.

Loans for purchasing and carrying Government securities increased by 1.8 billion dollars over the Fifth War Loan, an increase larger than that of any other drive. Of the total amount advanced by banks in 101 cities, loans to brokers and dealers accounted for 500 million and loans to others for 1.3 billion.

Accompanying purchases of securities during the Fifth Drive, adjusted demand deposits declined by 4.7 billion dollars at banks in 101 cities. Government deposits at these same banks increased by 10.5 billion dollars. The difference reflected the effect of the increase in bank loans and investments.

**SEVENTH FEDERAL**



**RESERVE DISTRICT**

